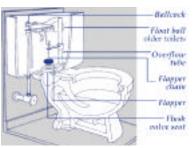
## Save Water/\$ave Dollars

Each month this year, we'll be presenting a simple and useful tip for reducing your water use and reducing your water bill. Most people don't realize how much water can go down the drain from a dripping faucet, or that more than half the water they consume is used outside the house to irrigate plants. Knowing some simple ways to save water can save you big on your water bill each month. Check Tucson Water's web site at www.cityoftucson.org/water/for more water saving tips.

#### **February Tip:**

### Lose Your Leaks

It may seem like a simple thing to stop the water leaks in your home, but Tucson Water surveys show that 20 percent of all faucets and toilets in Tucson are probably leaking right now!



A dripping faucet or running toilet can waste between 15 and 100 gallons of water a day! That's up to 36,000 gallons a year.

So watch, and listen

for leaks in your home and try to repair them promptly. It will save water and reduce your water bill.

Faucet leaks are easy to spot and usually can be repaired with just a single new part. Almost all toilet leaks are caused by the "flapper"which tends to wear out in just three years. Remember to shut off the water to the fixture before you start working on it. You might also want to consult a good do-it-yourself how-to book, especially if you're new to fixing leaks.

Continued Inside



#### Water 101

Throughout the year, Tucson Water receives hundreds of questions from customers about water issues ranging from water quality to system and infrastructure questions and everything in between.Our customers are very well informed and inquisitive about water. Perhaps it's because they understand so well how important water is to a desert community like Tucson. Because of this high level of interest, we are beginning a new occasional column called Water 101 that will explain an aspect of your water system. If you have a question you'd like to have answered here, or if you have a suggestion for a topic, call us at 791-4331 or email to

TW\_Web1@ci.tucson.az.us. We hope you find Water 101 informative.

February 2003 http://www.cityoftucson.org/water/



## On the Water Front

In the West, everyone wants water and the behind the scenes discussions about who gets it are going on everyday. That's just one of the issues Tucson Water works on that our customers rarely hear about.

At Tucson Water, our number one concern is making sure we have enough quality water for you and your family. But high on the list of important projects is watching out for your interests in the areas of water quality and water resources. We do that in several ways – through working with national agencies on water research projects and by participating in organizations that make water resource decisions.

Tucson Water is deeply involved at the national level with the American Water Works Association (AWWA), the Association of Municipal Water Agencies (AMWA) and the Western Urban Water Coalition (WUWC) on a number of issues – from research projects to the discussion of water quality regulations proposed by the U.S.Environmental Protection Agency. My position as a volunteer member of the Board of Directors of WUWC and AMWA allows me to be in touch with western water issues, particularly along the Colorado River.

Through these organizations, we are now or have recently been involved in national-level research projects on water quality, customer involvement and water system security, among others. The general findings from the security study we assisted with have been shared with water utilities across the country to help them improve their precautions and security measures.

We also work closely with the Central Arizona Water Conservation District (CAWCD) – the non-profit organization that governs the use of Colorado River water in Arizona. With my recent election to the Board of Directors of the CAWCD, I'll be working with the other members from Tucson to make sure Arizona continues to receive its share of this vital resource.

Obviously, our Congressional delegation and other elected officials from southern Arizona are also very important in determining how water is distributed between Arizona and other nearby states. We keep these elected leaders informed about our issues and concerns and make sure they are aware of how we use our water today and what our plans are for the future.

Water is certainly a precious resource in Arizona and across the West. I want you to know that at Tucson Water we're always looking out for your best interest in all of these areas. It's one way we work for you to make sure we all have enough water for today and for the future.

David V. Moder

David V. Modeer Director, Tucson Water

# Lose Your Leaks

Continued from Back

Tucson Water wants you to reduce your water use and reduce your water bill.
Water conservation isn't just for summer.

For more information about how to conserve water, call 791-4331 or visit Tucson Water's web site at www.cityoftucson.org/water/.

## Clearwater Quality Report - January 2003

47\* Sodium (ppm)

279 Mineral Content (ppm)

**102\*** Hardness (ppm)

**8.1** pH (units)

Neg\* Coliform Bacteria

1.02 Chlorine level average (ppm)

**83.2** Temp (deg F)

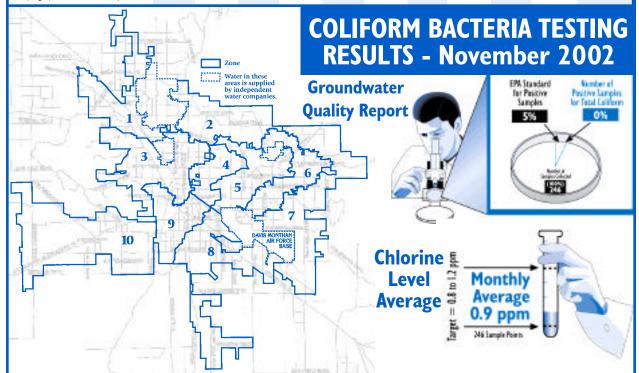
\* Values for December 2002

The Chlorine level for November 2002 listed in last month's Water Connection was incorrect.

The actual level was 0.97

#### **GROUNDWATER QUALITY REPORT - November 2002**

|                 | Water Quality<br>Zone | ı       | 2       | 3             | 4            | 5            | 6              | 7              | 8              | 9       | 10           | System<br>Wide |
|-----------------|-----------------------|---------|---------|---------------|--------------|--------------|----------------|----------------|----------------|---------|--------------|----------------|
| Sodium (ppm)    | <b>Average</b>        | 44      | 46      | 48            | 38           | 40           | 37             | 32             | 43             | 47      | 40           | 41             |
|                 | <i>Range</i>          | 35-53   | 43-48   | 29-62         | <i>30-47</i> | <i>27-47</i> | <i>30-47</i>   | 21-44          | 41-45          | 39-56   | <i>38-42</i> | 21-62          |
| Mineral Content | <b>Average</b>        | 4       | 287     | 318           | 242          | 256          | 250            | 230            | 387            | 281     | 218          | 280            |
| (ppm)           | <i>Range</i>          | 241-584 | 259-305 | 199-445       | 182-339      | 164-320      | <i>203-296</i> | <i>179-320</i> | <i>346-439</i> | 212-405 | 211-230      | 164-584        |
| Hardness (ppm)  | <b>Average</b>        | 171     | 119     | 139           | 99           | 108          |                | 4              | 211            | 116     | 76           | 122            |
|                 | <i>Range</i>          | 161-181 | 107-137 | <i>79-219</i> | 78-122       | 71-144       | 96-125         | 104-127        | 180-268        | 72-190  | 72-79        | 71-268         |
| pH (units)      | <b>Average</b>        | 7.6     | 7.9     | 7.7           | 7.8          | 7.7          | 7.9            | 7.7            | 7.4            | 7.7     | 7.5          | 7.7            |
|                 | <i>Range</i>          | 7.2-8.0 | 7.5-8.2 | 7.3-8.2       | 7.4-8.1      | 7.0-8.2      | 7.2-8.3        | 7.3-8.0        | 7.2-7.5        | 7.2-8.1 | 7.4-7.8      | 7.0-8.3        |
| Temperature     | <b>Average</b>        | 77      | 79      | 77            | 80           | 77           | 77             | 77             | 77             | 79      | 80           | 78             |
| (deg F)         | <i>Range</i>          | 74-79   | 76-84   | 71-83         | <i>75-85</i> | 72-83        | 68-84          | 71-81          | 73-81          | 71-85   | <i>77-83</i> | 68-85          |



"PPM" means one part per million; 1 ppm = 1 teaspoon in 1,320 gallons

To give you a more accurate measurement of the water quality in your neighborhood, the Tucson Water service area has been divided into 10 zones

based on differences in water pressure and water quality. For a detailed description of the zone boundaries, call 791-4331.

# Water 101 Where Does Our Water Come From?

## **Groundwater Contamination**

Contamination of groundwater is a problem throughout the United States and stems from the way people disposed of waste products many years ago. Car batteries, solvents and other chemicals that were put into landfills or, worse, dumped in washes or buried in the desert have contaminated some parts of the water table, Tucson Water tests for these chemicals on a regular basis and when they are found, it often leads to the closing of the well in question. Tucson Water and the City's Office of Environmental Management constantly monitor these sites and are working to protect our groundwater.

Tucson has three water sources – groundwater, Colorado River water, and reclaimed water.

# How Your Water Is Delivered To You Groundwater Gallon Reservoir Well Chlorine Treatment To Booster Station Water Table Aquifer

#### **Groundwater**

For decades, this was our only water source, coming from wells drilled throughout the metropolitan area. Groundwater comes from the aquifer – a porous layer of gravel and earth that exists at various depths beneath the ground. This water has collected over thousands of years from natural recharge of rain and snowmelt runoff. We've pumped it for decades and in some places the water table

You can find our groundwater wells located all over the metropolitan area. There might be one in your neighborhood, but that may not be where your water comes from. Over the years we have, for the most part, done away with delivering water directly from

has dropped more than

wells to neighborhoods. Today most of our groundwater is pumped to reservoirs and enters the water distribution system from there. This

lets Tucson Water better control water quality and deliver almost all water via gravity although booster stations are needed in some areas of town. Water leaves the reservoir in large transmission mains and passes through valves into smaller and smaller pipes until it reaches your street or alley and the 2 to 6 inch service line that supplies water in

**Customers' Homes** 

Aquifer

your neighborhood.

So your water may not come from that well down the street from your

house. In fact, that well may not even be in operation. Many Tucson Water wells have been shut down, or put on standby status, to let the water table beneath them recover from over pumping. Since May 2001, our use of the Clearwater blend, a mix of recharged Colorado River water and groundwater has allowed us to stop pumping most of the wells in areas where the water table had dropped significantly. As a result, last year, Tucson Water hydrologists saw the water table in some areas begin to rise for the first time in 50 years.

Next month:Colorado River Water

#### Visit the Tucson Water Web Site at http://www.cityoftucson.org/water

200 feet.

*Your Water Connection* is produced by Tucson Water. To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to: Customer Information, P.O. Box 27210, Tucson, AZ 85726-7210.



City of Tucson TTY number: 791-2639
Si usted desea este documento escrito en

i usted desea este documento escrito en español, por favor, llame al 791-4331.